

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-7 (Canceled).

Claim 8 (New): A method for separating mixed signals into component signals comprising:

- (a) producing current frames from said mixed signals;
- (b) separating said current frames into component signals of the current frame;
- (c) transforming said component signals using nonlinear functions into nonlinear-transformed signals;
- (d) computing aliasing-free normalized cross-power spectra of said component signals and said nonlinear-transformed signals in (c);
- (e) computing natural gradient using said cross-power spectra;
- (f) updating separating filter coefficients using said natural gradient;
- (g) normalizing said separating filter coefficients;
- (h) determining convergence conditions and iterating from (a) to (g) until convergence; and
- (i) separating said mixed signals into component signals using said separating filter coefficients after convergence.

Claim 9 (New): The method of claim 8 wherein (b) further comprises:

- (b1) transforming said mixed frames and said separating filter coefficients into the frequency domain;
- (b2) computing component signals in the frequency domain, and thereby transforming said component signals back into the time domain; and

(b3) zeroing first L samples of said component signals, thereby producing component signals.

Claim 10 (New): The method of claim 8 wherein step (d) further comprises:

(d1) transforming said component signals and said nonlinear-transformed signals into the frequency domain;

(d2) computing cross-power spectra using said component signals and said nonlinear-transformed signals in the frequency domain;

(d3) computing power spectra of said component signals and the power spectra of nonlinear-transformed signals;

(d4) computing normalized cross-power spectra; and

(d5) transforming said normalized cross-power spectra back into the time domain; and applying the time domain constraint for preserving only the first L samples.

Claim 11 (New): The method of claim 8 wherein (e) further comprises:

(e1) applying the nonholonomic constraints to said aliasing-free normalized cross-power spectra; and

(e2) computing said natural gradient using said separating filter coefficients and said nonholonomic-constrained cross-power spectra.

Claim 12 (New): An apparatus of claim 8 for separating a plurality of the mixed signals into a plurality of component signals using the frequency-domain normalized multichannel blind deconvolution method.

Claim 13 (New): A computer readable storage medium of claim 8 containing a program that, when executed upon a general purpose computer system, causes the general purpose computer system to become a specific purpose computer system that separates a plurality of the mixed signals into a plurality of component signals using the frequency-domain normalized multichannel blind deconvolution method.